

<b>REFERENCES</b>
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Boyer, Brian E. and Kenneth Brodnax, 1996. *Oil and Gas Production Emission Factors and Estimation Methods*. Complete Oil Field Management and Maintenance, Inc., Lafayette, Louisiana, and Mobil Exploration and Production Company, Houston, Texas. Presented at the Emission Inventory: Key to Planning Permits, Compliance and Reporting Conference, Air and Waste Management Association, September 4-6, 1996, New Orleans, Louisiana.

EIIP. 1999. *Preferred and Alternative Methods for Estimating Air Emissions from Oil and Gas Field Production and Processing Operations, Volume II, Chapter 10*. Prepared for the Point Sources Committee, Emissions Inventory Improvement Program under EPA Contract. U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards. Research Triangle Park, North Carolina.

TNRCC. 1996. *Technical Guidance Package for Annual Air Emissions Inventory Questionnaires, Oil and Gas Industry, Draft*. Texas Natural Resource Conservation Commission. Austin, Texas.



AUG 5 2013

# Invoice

Cimarron Energy Inc.

P O Box 722110

Norman, OK 73070

Phone: (405) 928-7373

Fax: (405) 928-7380

Invoice: 0020454-IN

Date: 7/31/2013

Bill To:	Ordered by:
----------	-------------

Antero Resources -APPALACHIAN  
1625 17th Street, Suite 300  
Denver, CO 80202

SN # SEE BELOW

Region: APPALACHIA  
WO#: 13635-19 THRU 24

Ship Date: 7/31/13

Customer P.O.	Our #	Sales Rep	F.O.B.	SHIP VIA	Terms	Tax ID
	26236 THRU 41 N	TW - J & A Service	WEST UNION, WV	LYNNCO	NET 30	26-0639252

Qty	Description	Unit Price	Total Amount
6.00	ECD 48" HV W/ PAD	\$27,172.00	\$163,032.00
	SN 1363519, 1363520, 1363521, 13635,22, 1363523, 1363524		

## New Remit Lockbox

Cimarron Energy Inc.  
P.O. Box 223857  
Pittsburgh, PA 15251-2857

## New Remit ACH/Wire

Account 103-3461  
Cimarron Energy Inc.  
BNY Mellon N.A.  
500 Ross Street, Pittsburgh, PA  
ABA 043 000 261  
Swift: MELNUS3P XXX

Net Invoice:	\$163,032.00
Freight:	\$6,794.00
Sales Tax:	\$0.00
<b>Invoice Total:</b>	<b>\$169,826.00</b>



## DELIVERY TICKET

NO. 26236Date 7/24/2013Ship From Newcastle

## DELIVERY

CUSTOMER

Half Welding Yard - Antero  
England's Run Road  
West Union, WV 26456  
POC: Jack Strickler # 304-588-6474

INTRA COMPANY

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Special Instructions

## EQUIPMENT

UNIT DESCRIPTION ECD-HV-47"DX240"LUNIT SERIAL NO. 13635-19  
(Work Order No.)

## ASME VESSELS

SERIAL NO. \_\_\_\_\_

SERIAL NO. \_\_\_\_\_

SERIAL NO. \_\_\_\_\_

SERIAL NO. \_\_\_\_\_

SERIAL NO. \_\_\_\_\_

SERIAL NO. \_\_\_\_\_

## Igniters

SERIAL NO. \_\_\_\_\_

SERIAL NO. \_\_\_\_\_

CIMARRON EMPLOYEE: Alan Markle VERIFIES THAT THE SERIAL NUMBERS LISTED  
ABOVE MATCH THE WORK ORDER NUMBER SPECIFIED. THIS SIGNATURE ALSO VERIFIES THAT ALL SECURITY TAGS ARE PROPERLY  
ATTACHED TO THE UNIT AT THE TIME OF SHIPMENT.

NOTES:

## RECEIPT

RECEIVED IN GOOD ORDER BY

DATE 7-24-13



# Invoice

Cimarron Energy Inc.

P O Box 722110

Norman, OK 73070

Phone: (405) 928-7373

Fax: (405) 928-7380

Invoice: 0034301-IN

Date: 11/20/2015

Bill To:	Ordered by:
Antero Resources -APPALACHIAN 1615 Wynkoop Street Denver, CO 80202	29446 N  CHAD DAVES  SN #  Region: APPALACHIA WO#: 13781-61
Ship Date: 11/20/15	

Customer P.O.	Our #	Sales Rep	FOB	SHIP VIA	Terms	Tax ID
A00131	SO 102523	N/A	shipping point	LYNNCO	NET 30	26-0639252

Qty	Description	Unit Price	Total Amount
1.00	ECD: HV 48" 2" W/ ACTUATOR	\$26,125.00	\$26,125.00
Serial Number:	13781-61	1.00-	

**New Remit Lockbox**  
Cimarron Energy Inc.  
Dept. 689  
P.O. Box 4348  
Houston, TX 77210-4346

**New Remit ACH/Wire**  
Account 5791940264  
Cimarron Energy Inc.  
Amegy Bank of Texas  
1801 Main Street  
Houston, TX 77002  
ABA# 113011256  
Swift Code: SWBKUS44  
Tel (713) 235-8811

PENNSBORO,  
WV

Net Invoice:	\$26,125.00
Less Discount:	\$0.00
Freight:	\$1,010.00
Sales Tax:	\$0.00
<b>Invoice Total:</b>	<b>\$27,135.00</b>

**DELIVERY TICKET**NO. 29446Date 11/20/2015Ship From Newcastle**DELIVERY**

CUSTOMER

Hall Welding Yard - Antero  
2795 Lambert Road  
Pennsboro, WV 26415  
POC: LOREN SELLERS # 304-588-3291

INTRA COMPANY

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Special Instructions

**EQUIPMENT**UNIT DESCRIPTION ECD-HV-47"DX240"LUNIT SERIAL NO. 13781-61  
(Work Order No.)**ASME VESSELS**

SERIAL NO. \_\_\_\_\_

SERIAL NO. \_\_\_\_\_

SERIAL NO. \_\_\_\_\_

SERIAL NO. \_\_\_\_\_

SERIAL NO. \_\_\_\_\_

SERIAL NO. \_\_\_\_\_

**Igniters**

SERIAL NO. \_\_\_\_\_

SERIAL NO. \_\_\_\_\_

CIMARRON EMPLOYEE: Alan Madsen VERIFIES THAT THE SERIAL NUMBERS LISTED  
ABOVE MATCH THE WORK ORDER NUMBER SPECIFIED. THIS SIGNATURE ALSO VERIFIES THAT ALL SECURITY TAGS ARE PROPERLY  
ATTACHED TO THE UNIT AT THE TIME OF SHIPMENT.

NOTES:

**RECEIPT**

RECEIVED IN GOOD ORDER BY

DATE

11-20-15





Invoice Number: NC00000268

Page: 1 of 1

Date: 12/19/2016

Salesperson:

AN00004

B Antero Resources -APPALACHIAN  
I 1615 Wynkoop Street  
L Denver CO 80202  
L  
T  
O

S Antero Resources -APPALACHIAN  
H 1615 Wynkoop Street  
I Denver CO 80202  
P  
T  
O

## Fax:

Fax:					
Order	Purchase Order	Weight	Ship Via	Terms	
ECD0000027	CEA04480 13862-13-52			N30	
Line/Rel	Qty Ordered	Qty Shipped	Back Order	Unit Price	Extended Price
1	40.000				

Item: ECDHV

Description ECD: HV 48"

U/M: EA

Date Shipped: 12/9/2016

Ext Price: 1,032,600.00

38 1 unit shipped - 13862-41

25,815.00

Progressive Billing:

2 40.000

Item: Freight

Description Freight to Haul Product to Customer

U/M: EA

Date Shipped: 12/9/2016

Ext Price: 36,000.00

38 Freight - BOL #002795662MG DT #29829

900.00

Progressive Billing:

Remit to Lockbox  
Cimarron Energy Inc.  
Dept 699  
P.O. Box 4346  
Houston, TX 77210-4346

Remit ACH/Wire  
Account: 5791940264  
Cimarron Energy Inc.  
Amegy Bank of Texas  
Houston, TX 770022  
ABA#: 113011258  
Swift Code: SWBKUS44  
Tel: (713)235-8811

Sales Amount	26,715.00
Misc Charges	0.00
Freight	0.00
Sales Tax	0.00
Prepaid Amount	0.00
Total	26,715.00

**DELIVERY TICKET**NO. 29829Date 11/4/2016Ship From Newcastle**DELIVERY**

CUSTOMER

Hall Welding Yard - Antero  
2798 Lamberton RD  
Pennsboro, WV 26415  
POC: Loren Sellers # 304-588-3291

INTRA COMPANY

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Special Instructions

**EQUIPMENT**UNIT DESCRIPTION ECD-HV-47"DX240"LUNIT SERIAL NO. 13862-41  
(Work Order No.)**ASME VESSELS**

SERIAL NO. \_\_\_\_\_

SERIAL NO. \_\_\_\_\_

SERIAL NO. \_\_\_\_\_

SERIAL NO. \_\_\_\_\_

SERIAL NO. \_\_\_\_\_

SERIAL NO. \_\_\_\_\_

**Igniters**

SERIAL NO. \_\_\_\_\_

SERIAL NO. \_\_\_\_\_

CIMARRON EMPLOYEE: Ron Butera VERIFIES THAT THE SERIAL NUMBERS LISTED  
ABOVE MATCH THE WORK ORDER NUMBER SPECIFIED. THIS SIGNATURE ALSO VERIFIES THAT ALL SECURITY TAGS ARE PROPERLY  
ATTACHED TO THE UNIT AT THE TIME OF SHIPMENT.

NOTES:


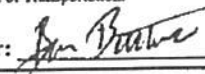
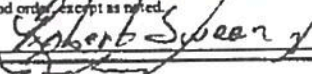
**RECEIPT**

RECEIVED IN GOOD ORDER BY

Robert Swamy

DATE

11-4-16

					<b>BOL NO: 002795662MG</b>		
<b>BILL OF LADING</b>					<b>Carrier: L &amp; B TRANSPORT INC</b>		
<b>Ship From</b>					<b>Pickup Date: 11-04-2016</b>		
CIMARRON NEWCASTLE 4190 S HARVEY NEWCASTLE, OK 73065 Belinda White Ship\Rec Hrs 0700-1430 M-F, 800-424-3952,					<b>Origin Terminal</b>		
					<b>Destination Terminal</b>		
<b>Ship To</b>					<b>References:</b>  BOL  PO Number NWC704 Part Number Shipping Item WO Number 13862-41 13862-42 13862-43		
HALL WELDING YARD 2798 LAMBERTON RD PENNSBORO, WV 26415 LOREN SELLERS, 304-588-3291,							
<b>3rd Party Freight Charges Bill To</b>							
LYNNCO SUPPLY CHAIN SOLUTIONS PO BOX 2170 BROKEN ARROW, OK 74013-2170 LYNNCO TMG, 918-664-7490, F: 918-664-7493							
<b>Customer Special Instructions:</b> BELINDA 800-424-3952 PERSON SIGNING FOR PRODUCT MUST LEGIBLY PRINT NAME ON BOL OR PAYMENT COULD BE DELAYED. NO DOCKS AT CIMARRON LOCATION. CUSTOMER REQUIRES DRIVER TO HAVE AND UTILIZE PERSONAL PROTECTION EQUIPMENT (HARD HAT, SAFETY GLASSES, STEEL TOED BOOTS, AND LONG PANTS)....STEPDECK CRANE/CREW UNLOAD						<b>Freight Terms:</b> Prepaid: _____ Collect: _____ 3rd Party: <u>  X  </u>	
<b>Accessorials:</b> Appointment							
Qty	Type	Weight	HM (X)	NMFC	Item ID	Item Description <small>(Identification Number (UN or NA), Proper Shipping Name, Hazard Class, Packing Group, per 172.101, 172.202, 172.203)</small>	LTL Class
3	UNT	32000 lb			Shipping Item	ECD-HV-47DX240L Dimensions: 256.0 X 51.0 X 72.0	85.0
3		32000 lb		<b>GRAND TOTALS:</b>			
Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property as follows: "The agreed or declared value of the property is specifically stated by the shipper to be not exceeding _____ per _____."							
<b>Remit COD to:</b>							
Collect _____ Prepaid _____ Customer check acceptable _____ COD Amount: _____							
Note: Liability limitation for loss or damage in this shipment may be applicable. See 49 USC 14706(c)(1)(A) and (B).							
Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications and rules that have been established by the carrier and are available to the shipper, on request, and to all applicable state and federal regulations.				<b>Trailer Loaded:</b> _____ by Shipper _____ by Driver		<b>Freight Counted:</b> _____ by Shipper _____ by Driver	
<b>Shipper Signature/Date:</b> This is to certify that the above named materials are properly classified, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. Shipper: 				<b>Carrier Signature/Pickup Date:</b> Carrier acknowledges receipt of packages and required placards. Carrier certifies emergency response information was made available and/or carrier has the Department of Transportation emergency response guidebook or equivalent documentation in vehicle. Property described above is received in good order, except as noted. Carrier: 			





## Print Work Order

Version	11.3
Date	04/30/2018 15:30
User	NSUMMERFIELD
Work Order	20587041 [ WV Air Compliance Inspection Checklist (Quarterly) ]
Barcode	No
Task Plan Instructions	No
Work Order Custom Fields	Yes
Work Order User Defined Fields	Yes
Equipment Custom Fields	Yes
Equipment User Defined Fields	Yes
Booked Hours	Yes
Print Attachments	Yes
Print Images	Yes
Reprint	No
Include Comments	Yes
Include Task Plan Checklist	No
Include Nonconformities	Yes

## Work Order

<b>Work Order</b>	20587041	<b>Scheduled Start Date</b>	04/01/2018
	WV Air Compliance Inspection Checklist (Quarterly)	<b>Scheduled End Date</b>	06/29/2018
<b>Status</b>	10-Closed		Reprint
<b>Created By</b>	MGROGG	<b>Date Started</b>	
<b>Created</b>	03/29/2018	<b>Date Completed</b>	04/03/2018
		<b>Time Completed</b>	08:00

<b>WO Type</b>	PM	<b>Parent WO</b>	
	Preventive maintenance	<b>Class</b>	REG
<b>Department</b>	PRODWV	<b>Priority</b>	ROUTINE
	Production West Virginia	<b>Warranty</b>	
<b>PM Schedule</b>	PROD-AIR-001	<b>Safety</b>	
	WV Air Compliance Inspection Checklist (Quarterly)	<b>Equipment Criticality</b>	6
<b>Cost Code</b>		<b>Assigned To</b>	NSUMMERFIELD
		<b>Reported By</b>	MGROGG
<b>Problem Code</b>		<b>Assigned By</b>	ENV
		<b>Campaign</b>	
<b>Project</b>		<b>Campaign Event</b>	
<b>Standard WO</b>			

## Equipment

<b>Equipment</b>	YVONNEPAD	<b>Location</b>	YVONNEPAD-L
	Yvonne Pad	<b>Reliability Ranking</b>	
<b>Manufacturer</b>		<b>Reliability Ranking Index</b>	
<b>Model</b>		<b>Reliability Ranking Score</b>	
<b>Serial Number</b>			

## Equipment Custom Fields

## Equipment User Defined Fields

**Prospect Area** CANTON

## Work Order Custom Fields

## Work Order User Defined Fields

**How Found Code** PM Created

## Comments

**NSUMMERFIELD [04/06/2018 14:10]:**

Inspection took place on 4/3/18 between 8:00 am - 10:00 am  
All first attempt repairs were made by warrior crew and roustabout  
Leaks were detected within the closed vent system

**Leaks with Work Orders:**

- GPU Brocade 1H gas out line hammer union threads leaking WO # 20588167

- Leaks fixed on site:

- Tank 14 enardo leaking

- Tank 1 Hammer Union

- GPU Burlington 1H stainless connection between butterfly valves

- GPU Manzarek 2H stainless connection into butterfly valve

**Combustor(s):**

## Comments

SN#	Set-Point	Temp(F)
13635-24	2018	859
1378161	1998	922
13862-41	2026	94 main off low prs

## VRU(s):

Brand	Skid	Hours	Status
Kubota	11358	9605	Temp
Kubota	10434	8953	Temp
Kubota	11433	10250	Temp
Kubota	11442	9210	Temp
Kubota	11246	4583	Temp
Kubota	10852	486	

**NSUMMERFIELD [04/06/2018 14:25]:**

WO# 20588167 Repair made on 4/5/18 and re-monitored on 4/5/18. No leak was detected work order closed.

## Activity List

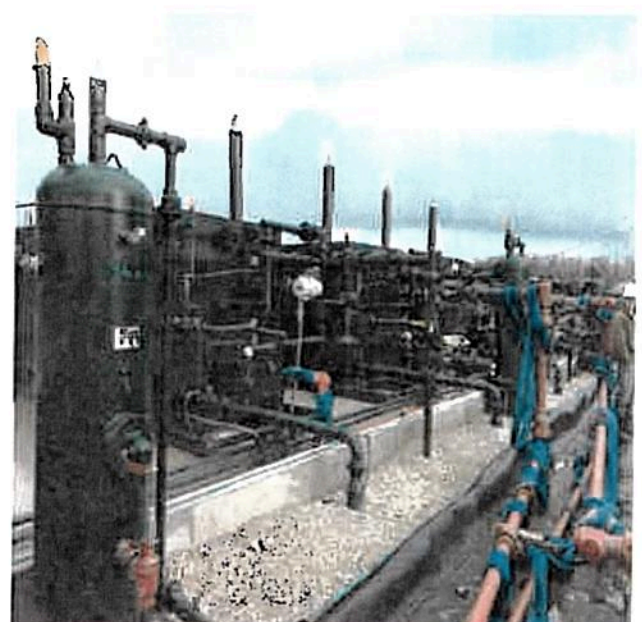
Activity	Task Plan Description	Trade	Start Date	End Date	Supplier
10	WV air compliance inspection Quarterly	FT	04/01/2018	04/01/2018	
Booked Hours					
	Employee	Date	Time On	Time Off	Total Time
					Type of Hours



















## Method 22 Inspection Form

### Site Information

Pad Name YVONNE

Date 4/3/2018

Observer Nick Summerfield

Temperature 43 F

InspectionType ☒ Initial ☐ Monthly ☐ Quarterly

Weather Rain

### Method 22 - Visual Determination of Fugitive Emissions

Total observed emissions: 0 Min

Clock Time	Observation period duration (minutes)	Duration visible emissions (minutes)	Drawing
8:00 AM	15	0	
8:15 AM	15	0	
8:30 AM	15	0	
8:45 AM	15	0	
9:00 AM	15	0	
9:15 AM	15	0	
9:30 AM	15	0	
9:45 AM	15	0	
10:00 AM	15	0	

Name (Inspector): Nick Summerfield

Signature:



## Method 22 Inspection Form





## Air Compliance Inspection Form

### II) Tank Inspections

#### Tank Vents

##### Olfactory

##### Visual

##### Auditory

**2. Cracks**

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

**3. Loose connections**

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

**4. Holes and/or gaps**

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

**5. Broken and/or missing caps or closure**

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

**6. Liquid Leaks**

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

*If so, Immediately contact Env. Representative*

**Comments:**

#### Tank Structure

##### Olfactory

##### Visual

##### Auditory

**7. Cracks**

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

**8. Holes and/or Gaps on Structure**

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

**9. Broken, craked or damaged seals**

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

**10. Broken and/or missing access  
(e.g. manholes)**

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

**11. Liquid Leaks**

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

*If so, Immediately contact Env. Representative*

**Comments:**





## Air Compliance Inspection Form

### II) Tank Inspections (Continued)

#### Tank Piping

	<u>Olfactory</u>	<u>Visual</u>	<u>Auditory</u>
12. Cracks / pitting	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
13. Missing caps or seals	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
14. Damaged valves or connections	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Comments:

### IV) Flare / Condenser

#### Ignition System

15. Flare operated with a flame present if gases being vented to it? ☒ Yes ☐ No
16. An automatic flare ignition system has been installed ☒ Yes ☐ No
17. Presence of pilot flame? ☒ Yes ☐ No
18. If using a pilot flame, is there an alarm system for alerting the lack of flame in the pilot? ☒ Yes ☐ No
19. If using an electric arc ignition system, does the arcing of the electric arc ignition system pulse continually. ☐ Yes ☐ No

Comments:

No Bypass

#### Equipment Malfunction

20. Air vent obstruction? ☐ Yes ☒ No
21. Is there evidence of liquids reaching the flare? ☐ Yes ☒ No
22. Were gases vented through the flare without a flame present? ☐ Yes ☒ No



## Air Compliance Inspection Form

### IV) Flare / Condenser (Continued)

#### 23. Flare shutdown?

☐ Yes ☒ No

*If yes, look for the length of the event and the cause of the malfunction  
in the comments box*

**Comments:**

#### Work Orders

Photo #	Required Corrective Action	Item #	Resp. Party	Priority
1				
2				
3				
4				
5				

Observations were discussed with Antero as necessary on at

Name (Antero):

Signature:

Name (Inspector):

Signature:



## Air Compliance Inspection Form

### Site Photos for Corrective Actions

No Photo  
Taken

Photo 1

No Photo  
Taken

Photo 2

No Photo  
Taken

Photo 3

No Photo  
Taken

Photo 4

No Photo  
Taken

Photo 5

#

1

2

3

4

5

Photo Descriptions



## Method 22 Inspection Form

### Site Information

Pad Name YVONNE

Date 6/26/2018

Observer Alicia Rafuse


Temperature 73 F

InspectionType ☐ Initial ☒ Monthly ☐ Quarterly

Weather Cloudy

### Method 22 - Visual Determination of Fugitive Emissions

Total observed emissions: 0 Min

Clock Time	Observation period duration (minutes)	Duration visible emissions (minutes)	Drawing
11:00 AM	1	0	
	1	0	
	1	0	
	1	0	
	1	0	
	1	0	
	1	0	
	1	0	
	1	0	
	1	0	
	1	0	
	1	0	
11:15 AM	1	0	

Wind Direction 0

#### Additional Notes:

No issues

Name (Inspector): Alicia Rafuse

Signature:





## Air Compliance Inspection Form

### II) Tank Inspections

#### Tank Vents

##### Olfactory

##### Visual

##### Auditory

#### 2. Cracks

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

#### 3. Loose connections

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

#### 4. Holes and/or gaps

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

#### 5. Broken and/or missing caps or closure

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

#### 6. Liquid Leaks

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

*If so, Immediately contact Env. Representative*

#### Comments:

#### Tank Structure

##### Olfactory

##### Visual

##### Auditory

#### 7. Cracks

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

#### 8. Holes and/or Gaps on Structure

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

#### 9. Broken, cracked or damaged seals

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

#### 10. Broken and/or missing access (e.g. manholes)

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

#### 11. Liquid Leaks

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

*If so, Immediately contact Env. Representative*

#### Comments:



## Air Compliance Inspection Form

### II) Tank Inspections (Continued)

#### Tank Piping

##### Olfactory

##### Visual

##### Auditory

- |                                   |   |   |   |
|-----------------------------------|---|---|---|
| 12. Cracks / pitting              | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 13. Missing caps or seals         | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 14. Damaged valves or connections | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |

Comments:

### IV) Flare / Condenser

#### Ignition System

- |  |   |
|--|---|
| 15. Flare operated with a flame present if gases being vented to it?   | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 16. An automatic flare ignition system has been installed  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 17. Presence of pilot flame?   | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 18. If using a pilot flame, is there an alarm system for alerting the lack of flame in the pilot?                    | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 19. If using an electric arc ignition system, does the arcing of the electric arc ignition system pulse continually. | <input type="checkbox"/> Yes <input type="checkbox"/> No            |

Comments:

#### Equipment Malfunction

- |  |   |
|--|---|
| 20. Air vent obstruction?  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 21. Is there evidence of liquids reaching the flare?             | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 22. Were gases vented through the flare without a flame present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |



## Air Compliance Inspection Form

### IV) Flare / Condenser (Continued)

#### 23. Flare shutdown?

☐ Yes ☒ No

*If yes, look for the length of the event and the cause of the malfunction in the comments box*

Comments:

#### Work Orders

Photo #	Required Corrective Action	Item #	Resp. Party	Priority
1				
2				
3				
4				
5				

Observations were discussed with Antero as necessary on \_\_\_\_\_ at \_\_\_\_\_

Name (Antero):

Signature:

Name (Inspector):

Signature:



## Air Compliance Inspection Form

### Site Photos for Corrective Actions

No Photo  
Taken

Photo 1

No Photo  
Taken

Photo 2

No Photo  
Taken

Photo 3

No Photo  
Taken

Photo 4

No Photo  
Taken

Photo 5

#

1

2

3

4

5

**Photo Descriptions**



## Work Order

<b>Work Order</b>	20667105	<b>Scheduled Start Date</b>	07/01/2018
	WV Air Compliance Inspection Checklist (Quarterly)	<b>Scheduled End Date</b>	09/28/2018
<b>Status</b>	10-Closed		Reprint
<b>Created By</b>	MGROGG	<b>Date Started</b>	
<b>Created</b>	06/29/2018	<b>Date Completed</b>	07/12/2018
		<b>Time Completed</b>	10:00

<b>WO Type</b>	PM	<b>Parent WO</b>	
	Preventive maintenance	<b>Class</b>	REG
<b>Department</b>	PRODWW	<b>Priority</b>	ROUTINE
	Production West Virginia	<b>Warranty</b>	
<b>PM Schedule</b>	PROD-AIR-001	<b>Safety</b>	
	WV Air Compliance Inspection Checklist (Quarterly)	<b>Equipment Criticality</b>	6
<b>Cost Code</b>		<b>Assigned To</b>	NSUMMERFIELD
		<b>Reported By</b>	MGROGG
<b>Problem Code</b>		<b>Assigned By</b>	ENV
		<b>Campaign</b>	
<b>Project</b>		<b>Campaign Event</b>	
<b>Standard WO</b>			

## Equipment

<b>Equipment</b>	YVONNEPAD	<b>Location</b>	YVONNEPAD-L
	Yvonne Pad	<b>Reliability Ranking</b>	
<b>Manufacturer</b>		<b>Reliability Ranking Index</b>	
<b>Model</b>		<b>Reliability Ranking Score</b>	
<b>Serial Number</b>			

## Equipment Custom Fields

## Equipment User Defined Fields

**Prospect Area** CANTON

## Work Order Custom Fields

## Work Order User Defined Fields

**How Found Code** PM Created

## Comments

**NSUMMERFIELD [08/07/2018 15:03]:**

Inspection took place on 7/12/18 between 9:50 am - 11:45 am  
All first attempt repairs were made by roustabout and pumper  
Leak was detected within the closed vent system

Leaks with work orders:

- GPU Burlington 1H dump bleeding WO# 20674342
- Well Head Brocade 2H quick exhaust leaking WO# 20674343

Leaks fixed on site:

- Tank 8 emergency hatch/enardo leaking: cleaned
- VRU 10852 stainless fitting into valve: tightened
- VRU 10852 blue hammer union: tightened
- VRU 10852 stainless fitting leaking: tightened
- GPU Walker 3H dump bleeding : adjusted
- GPU Walker 3H stainless fittings into dump: tightened
- GPU Yoho 1H stainless fitting into ball valve: tightened
- GPU Yoho 1H dump bleeding : adjusted

## Comments

- GPU Brocade 1H stainless fittings into ball valve: tightened
- GPU Brocade 2H stainless inot elbow: tightened
- Well head Burlington 2H fittings into elbow: tightened
- Well Head Brocade 1H stainless fitting into valve x2: tightened

## Combustor(s):

SN#	Set-Point	Temp(F)
13862-41	off	off
1378161	1988	1210
13635-24	2015	127 Low Pressure Main Off

## VRU(s):

Brand	Skid	Hours
Kubota	10434	12130 Temp
Kubota	10852	2643

**NSUMMERFIELD [07/27/2018 13:58]:**

WO# 20674342 After discussion with other air team members this issue is considered a low bleed. This will not be recorded in the future

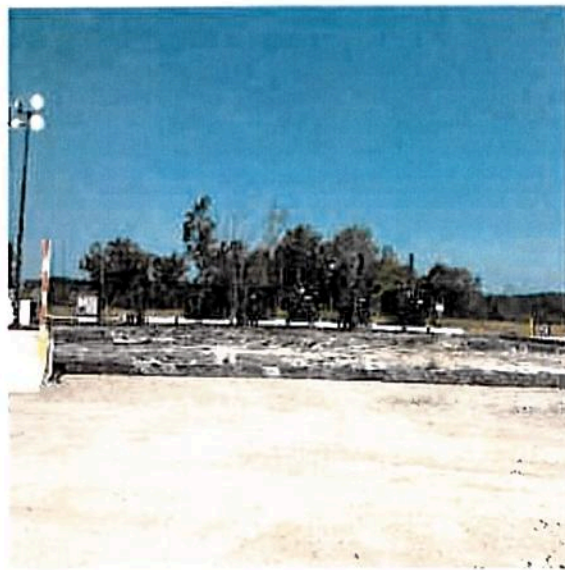
WO# 20674343 Repair made on 7/19/18 and re-monitored on 7/25/18. No leak detected work order closed.

## Activity List

Activity	Task Plan Description	Trade	Start Date	End Date	Supplier
10	WV air compliance inspection Quarterly Checklist	FT	07/01/2018	07/01/2018	
	<b>Sequence Description</b>				<b>Result</b>
	10 Type of inspection				Finding: QUAR
	20 Weather				Finding: CLR
	30 Temperature				Value: 74 Degree Fahrenheit
	40 Wind speed				Value: 5 Miles Per Hour
	50 Number of flares on site				Value: 3 ALL UNITS OF MEASURE
	60 Number of flares in operation				Value: 2 ALL UNITS OF MEASURE
	70 Is the pilot lit on the flare				Finding: YES
	75 Operating Temp. of Combuster				Value: 0 Degree Fahrenheit
	80 MFG of Flare?				Finding: CIM
	90 Flare operated with flame present if gasses being vented to it?				Finding: YES
	100 Type of automatic ignition system installed?				Finding: PFIR
	110 Is ther an alm system alerting the lack of flame in the pilot?				Finding: NO
	130 Air vent obstruction?				Finding: NO
	140 Is there evidence of liquids reaching the flare?				Finding: NO
	150 Were gasses vented through flare without a flame present?				Finding: NO
	160 Flare shutdown? If yes,why.				Finding: NO
	170 Method 22 complete?				Finding: YES
	180 Tank inspection completed?				Finding: YES
	190 Tank inventory(list in comments)				Completed: Yes
	200 Gpu inspection completed?				Finding: YES
	210 GPU inventory(list in comments)				Completed: Yes
	220 VRU inspection completed?				Finding: YES
	230 VRU nlventory(list in comments)				Completed: Yes
	240 VRU hours				Value: 0 Hour
	250 LDAR inspection completed?				Finding: YES

**Activity List**

Activity	Task Plan Description	Trade	Start Date	End Date	Supplier
	260 Type of LDAR inspection?	Finding: QUAR			
	270 LDAR camera calibrated?	Finding: YES			
	280 Calibration bottle number	Value: 1,003 ALL UNITS OF MEASURE			
	290 Were any leaks detected?Specify in closing comments	Finding: YES			
	300 List any associated work orders	Value: 2 ALL UNITS OF MEASURE			
<b>Task Plan Instructions</b>					
<b>Booked Hours</b>					
Employee	Date	Time On	Time Off	Total Time	Type of Hours











## Method 22 Inspection Form

### Site Information

Pad Name YVONNE

Date 7/12/2018

Observer Nick Summerfield

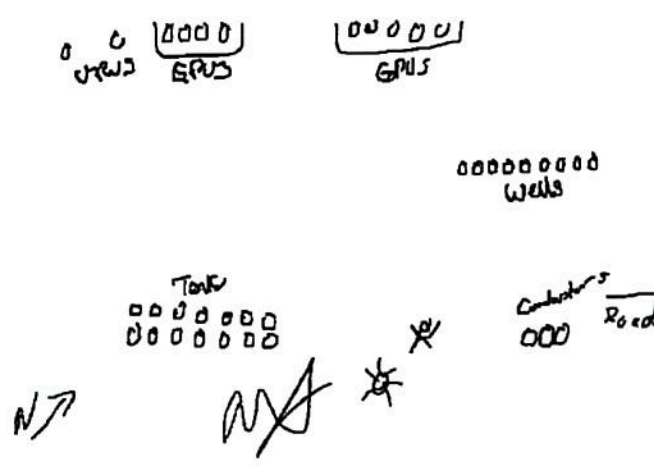
Temperature 74 F

InspectionType ☐ Initial ☐ Monthly ☒ Quarterly

Weather Clear

### Method 22 - Visual Determination of Fugitive Emissions

Total observed emissions: 0 Min

Clock Time	Observation period duration (minutes)	Duration visible emissions (minutes)	Drawing
10:00 AM	1	0	
	1	0	
	1	0	
	1	0	
	1	0	
	1	0	
	1	0	
	1	0	
	1	0	
	1	0	
	1	0	
	1	0	
10:15 AM	1	0	

Wind Direction 5 mph north west

Additional Notes:

Name (Inspector): Nick Summerfield

Signature: 



## Method 22 Inspection Form





## Method 22 Inspection Form

### Site Information

Pad Name YVONNE

Date 8/28/2018

Observer Alicia Rafuse

Temperature 71 F

InspectionType ☐ Initial ☒ Monthly ☐ Quarterly

Weather Clear

### Method 22 - Visual Determination of Fugitive Emissions

Total observed emissions: 0 Min

Clock Time	Observation period duration (minutes)	Duration visible emissions (minutes)	Drawing
8:10 AM	1	0	<p>Hand-drawn sketch of a well pad layout. It includes a central wellhead, several rectangular storage tanks, and various pipes and valves. A north arrow points towards the top right. The signature 'Alicia Rafuse' is written across the bottom of the drawing area.</p>
	1	0	
	1	0	
	1	0	
	1	0	
	1	0	
	1	0	
	1	0	
	1	0	
	1	0	
	1	0	
	1	0	
	1	0	Wind Direction 0
	1	0	Additional Notes:
	1	0	No Issues
	1	0	
	1	0	
	1	0	
	1	0	Name (Inspector): Alicia Rafuse
	1	0	Signature:
8:25 AM	1	0	



## Air Compliance Inspection Form

### II) Tank Inspections

#### Tank Vents

##### Olfactory

##### Visual

##### Auditory

2. Cracks

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

3. Loose connections

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

4. Holes and/or gaps

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

5. Broken and/or missing caps or closure

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

6. Liquid Leaks

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

*If so, Immediately contact Env. Representative*

Comments:

#### Tank Structure

##### Olfactory

##### Visual

##### Auditory

7. Cracks

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

8. Holes and/or Gaps on Structure

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

9. Broken, craked or damaged seals

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

10. Broken and/or missing access  
(e.g. manholes)

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

11. Liquid Leaks

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

*If so, Immediately contact Env. Representative*

Comments:



## Air Compliance Inspection Form

### II) Tank Inspections (Continued)

#### Tank Piping

##### Olfactory

##### Visual

##### Auditory

12. Cracks / pitting

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

13. Missing caps or seals

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

14. Damaged valves or connections

☐ Yes ☒ No

☐ Yes ☒ No

☐ Yes ☒ No

Comments:

### IV) Flare / Condenser

#### Ignition System

15. Flare operated with a flame present if gases being vented to it?

☒ Yes ☐ No

16. An automatic flare ignition system has been installed

☒ Yes ☐ No

17. Presence of pilot flame?

☒ Yes ☐ No

18. If using a pilot flame, is there an alarm system for alerting the lack of flame in the pilot?

☒ Yes ☐ No

19. If using an electric arc ignition system, does the arcing of the electric arc ignition system pulse continually.

☐ Yes ☐ No

Comments:

#### Equipment Malfunction

20. Air vent obstruction?

☐ Yes ☒ No

21. Is there evidence of liquids reaching the flare?

☐ Yes ☒ No

22. Were gases vented through the flare without a flame present?

☐ Yes ☒ No



## Air Compliance Inspection Form

### IV) Flare / Condenser (Continued)

#### 23. Flare shutdown?

☐ Yes ☒ No

*If yes, look for the length of the event and the cause of the malfunction in the comments box*

Comments:

#### Work Orders

Photo #	Required Corrective Action	Item #	Resp. Party	Priority
1				
2				
3				
4				
5				

Observations were discussed with Antero as necessary on at

Name (Antero):

Signature:

Name (Inspector):

Signature:





## Air Compliance Inspection Form

### Site Photos for Corrective Actions

No Photo  
Taken

Photo 1

No Photo  
Taken

Photo 2

No Photo  
Taken

Photo 3

No Photo  
Taken

Photo 4

No Photo  
Taken

Photo 5

#

1

2

3

4

5

**Photo Descriptions**